What is claimed is:

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1. A <u>Brassica napus</u> plant comrising seed having a total glucosinolates content of about 18 μmol/g or less of defatted, air-dried meal;

the seed yielding oil having an α -linolenic acid content of 7% or less relative to total fatty acid content of said seed and a sulfur content of less than or equal to 3.0 ppm; and

the plant belonging to a line in which these traits have been stabilized for both the generation to which the seed belongs and that of its parent generation.

- 2. The seed produced by the plant of Claim 1.
- 3. The seed produced by the plant of Claim 1 wherein total glucosinate content is about 15 μ mol/g or less of defatted, air-dried meal.
 - 4. The oil of the seed produced by the plant of Claim 1.
- 5. A <u>Brassica napus</u> plant designated IMC 01 20 represented by seed deposited with the ATCC and bearing accession number 40579.
 - 6. The oil produced from the variety of Claim 5.
- 7. A Brassica napus seed yielding canola oil having, when hydrogenated, significantly reduced overall room-odor intensity relative to the overall room-odor intensity of generic canola oil, a significant difference in overall room odor-intensity indicated by a difference of greater than 1.0 obtained in a standardized sensory evaluation.
- 8. A <u>Brassica napus</u> comprising oil, which when non-hydrogenated, is significantly reduced in fishy odor intensity relative to the fishy odor intensity of generic canola oil, a significant difference in fishy odor intensity indicated by a difference of greater than 1.0 obtained in standardized sensory evaluation.

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- 9. A <u>Brassica napus</u> plant wherein at least one parent was the variety of Claims 1 or 5.
 - 10. The progeny of the plant of Claims 1, 5 or 9.
- 11. A plant produced from the crossing of IMC 01 with an agronomically elite variety of Brassica napus, the plant yielding a seed having a total glucosinolates content of about 18 μ mol/g or less of defatted, airdried meal, said seed yielding extractable oil having (1) an α -linolenic acid content of about 7% or less relative to total fatty acid content of said seed, and (2) a sulfur content of less than or equal to 3.0 ppm.
- 12. The plant of Claim 11, wherein the agronomically elite parent is the Canadian canola line, Westar.
- 13. A process for producing a canola of enhanced commercial utility comprising:
 - (a) crossing the <u>Brassica napus</u> IMC 01 with an agronomically elite variety;
 - (b) selecting the off-spring of step (a) which yield a seed having a total glucosinolates content of about 18 μmol/g or less of defatted, air-dried meal, said seed yielding extractable oil having (1) an α-linolenic acid content of about 7% or less relative to total fatty acid content of said seed, and (2) a sulfur content of less than or equal to 3.0 ppm.
 - 14. The oil extracted from the seed produced by the process of Claim 13.
- 30 15. A method of using the <u>Brassica napus IMC 01</u> comprising:
 - (a) crossing IMC 01 with an agronomically elite variety;
 - (b) selecting the off-spring of step (a) which yield a seed having a total

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glucosinolates content of about 18 μ mol/g or less of defatted, air-dried meal, said seed yielding extractable oil having (1) an α -linolenic acid content of about 7% or less relative to total fatty acid content of said seed, and (2) a sulfur content of less than or equal to 3.0 ppm;

- (c) producing sufficient progeny of the seed selected in step (b) to extract oil.
- 16. The <u>Brassica napus</u> designated HW 3.001, a progeny line of the cross of IMC 01 with Westar.
 - 17. An improved vegetable oil extracted from Brassica napus seeds, said seeds having:
- (1) an oil which exhibits following crushing 15 and extraction
 - (a) an α -linolenic acid content of 7% or less relative to total fatty acid content of said seed;
 - (b) a sulfur content of less than or equal to 3.0 ppm; and
 - (2) a total glucosinolates content of about $18 \ \mu \text{mol/g}$ or less of defatted, air-dried meal.
- 18. The oil produced from the progeny of Claim 1, 5 or 9, as described in Claim 10, wherein the stability of such oil measured in AOM hours is from about 25.0 to about 35.0.
 - 19. The oil as described by Claim 18 wherein the stability in AOM hours is from 26.8 to 31.5.